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EXAMINER	
WASSUM, LUKE S	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/807,264	WEISSMAN ET AL.	
	Examiner	Art Unit	
	Luke S. Wassum	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Applicants' amendment, filed 27 April 2007, has been received, entered into the record, and considered.

2. As a result of the amendment, claims 17-22, 24-34, 36-40, 45, 49, 51, 52, 54 and 55 have been amended. Claims 1-15 have been previously canceled. Claims 16-56 remain pending in the application.

The Invention

3. The claimed invention is a method and system for displaying documents/advertisements that are conceptually close to a user-supplied concept, wherein the retrieved documents/advertisements are ordered based upon monetary values associated with said documents/advertisements.

Priority

4. The Applicants' claim to domestic priority under 35 U.S.C. § 120, as a continuation of application 09/493,701, filed 28 January 2000, which is a continuation-in-part of application 09/431,760, filed 1 November 1999, is acknowledged.

5. Since the limitations of the claims, particularly the feature of ordering documents/advertisements based upon a monetary value associated with said documents/advertisements, does not appear to be supported by application 09/431,760, the priority date of the claims of the instant invention will be determined on a claim-by-claim basis as necessary.

Claim Objections

6. In view of the Applicants' amendment of claims 45, 49 and 54, the pending objections to these claims are withdrawn.

Claim Rejections - 35 USC § 112

7. In view of the Applicants' amendment to claims 19, 26, 32 and 38, the pending rejections of these claims under 35 U.S.C. §112, first paragraph are withdrawn.

8. In view of the Applicants' amendment to claims 17, 18, 20-22, 24, 25, 27, 28, 30, 31, 33, 34, 36, 37, 39, 40 and 52, the pending rejections of these claims under 35 U.S.C. § 112, second paragraph is withdrawn.

Claim Rejections - 35 USC § 101

9. In view of the Applicants' arguments on page 14 of their response, the rejections of claims 16-48 under 35 U.S.C. § 101 are withdrawn.

10. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 55 and 56 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

11. Regarding claim 55, this claim recites the process of generating a search result, but fails to recite a tangible result, a requirement for compliance with the provisions of 35 U.S.C. § 101 for a process or system that can be interpreted as being implemented through software.

For a result to be tangible, it must be more than just a thought or a computation; it must have real-world value rather than an abstract result. See *GOTTSCHALK, Comr. Pats. v. BENSON et al.* (US SupCt) 175 USPQ 673 at 676-77 (invention ineligible because it had "no substantial practical application").

Claim 55 includes steps for organizing concepts in a lexicon, receiving a search request, relating the search request to search terms in the lexicon, and searching a data set. There is no recitation of *any* result, such as the retrieval of elements matching the larger set of search terms, let alone a *tangible* result being provided.

12. Claim 56, fully incorporating the deficiency of its parent claim, is likewise rejected.

While this claim does recite the ordering of matched elements of the target data set, and thus reciting a *result*, that result is not tangible because the claim fails to recite anything having been done with the result, such as displaying or storing it.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 41, 43, 45, 47 and 53-55 are rejected under 35 U.S.C. 102(b) as being anticipated by **Addison et al.** (European Patent Application EP 0,597,630).

15. Regarding claim 41, **Addison et al.** teaches a method for displaying documents responsive to a received concept as claimed, comprising:

a) associating one or more documents with one or more concepts (see disclosure of concept indexing, beginning on page 7, line 45; see also disclosure that the final step of concept indexing is the assignment of index values which associate a specific document with a concept, page 10, lines 15-19);

b) receiving a concept (see disclosure of the receipt of a user's query embodying a concept, page 12, lines 45-60; see also the first step in the flowchart illustrated in drawing Figure 6, page 28);

c) determining one or more concepts close in meaning to the received concept (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

d) identifying one or more documents related to the received concept or one or more concepts close in meaning to the received concept (see disclosure that

the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

e) transmitting for display the one or more documents associated with the one or more concepts close in meaning to the received concept (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29).

16. Regarding claim 45, **Addison et al.** teaches a method for displaying documents responsive to a received concept as claimed, comprising:

a) associating one or more documents with one or more concepts (see disclosure of concept indexing, beginning on page 7, line 45; see also disclosure that the final step of concept indexing is the assignment of index values which associate a specific document with a concept, page 10, lines 15-19);

b) receiving a search input including at least one concept (see disclosure of the receipt of a user's query embodying a concept, page 12, lines 45-60; see also the first step in the flowchart illustrated in drawing Figure 6, page 28);

c) determining one or more concepts close in meaning to the concept in the search input (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

d) identifying one or more documents associated with the one or more concepts close in meaning to the concept in the search input (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

e) transmitting for display the one or more documents associated with the one or more concepts close in meaning to the concept in the search input (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29).

17. Regarding claim 53, **Addison et al.** teaches a system for displaying documents responsive to a received concept as claimed, comprising:

a) association means for associating one or more documents with one or more concepts (see disclosure of concept indexing, beginning on page 7, line 45; see also disclosure that the final step of concept indexing is the assignment of index values which associate a specific document with a concept, page 10, lines 15-19);

b) receiving means for receiving a concept (see disclosure of the receipt of a user's query embodying a concept, page 12, lines 45-60; see also the first step in the flowchart illustrated in drawing Figure 6, page 28);

c) determination means for determining one or more concepts close in meaning to the received concept (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

d) identification means for identifying one or more documents related to the received concept or one or more concepts close in meaning to the received concept (see disclosure that the word senses in the user's request, along

with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

e) transmission means for transmitting for display the one or more documents associated with the one or more concepts close in meaning to the received concept (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29).

18. Regarding claim 54, **Addison et al.** teaches a system for displaying documents responsive to a received concept as claimed, comprising:

a) association means for associating one or more documents with one or more concepts (see disclosure of concept indexing, beginning on page 7, line 45; see also disclosure that the final step of concept indexing is the assignment of index values which associate a specific document with a concept, page 10, lines 15-19);

b) receiving means for receiving a search input including at least one concept (see disclosure of the receipt of a user's query embodying a concept, page 12, lines 45-60; see also the first step in the flowchart illustrated in drawing Figure 6, page 28);

c) determination means for determining one or more concepts close in meaning to the concept in the search input (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

d) identification means for identifying one or more documents associated with the one or more concepts close in meaning to the concept in the search input (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

e) transmission means for transmitting for display the one or more documents associated with the one or more concepts close in meaning to the concept in the search input (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also

disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29).

19. Regarding claim 55, **Addison et al.** teaches a method of generating a search result in response to a search request as claimed, comprising:

a) organizing concepts according to their meaning into a lexicon of predefined known relationships between the concepts, said lexicon defining elements of a semantic space (see disclosure of the automatic acquisition of semantic networks, beginning on page 10, line 45);

b) receiving the search request and associating said search request with a first set of concepts from said lexicon (see disclosure of the receipt of a user's query embodying a concept, page 12, lines 45-60; see also the first step in the flowchart illustrated in drawing Figure 6, page 28; see also step 5 Index into the Concept Indexes, page 13, lines 51-56);

c) relating the search request to a larger set of search terms, wherein terms in the larger set of search terms are close in meaning to the search request based on semantic relationships defined by the lexicon (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also

the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39); and

d) searching a target data set for elements close in meaning to the larger set of search terms based on the semantic relationships (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-56).

20. Regarding claims 43 and 47, **Addison et al.** additionally teaches a method wherein the concept is received through a search request input by a user (see disclosure of the receipt of a user's query embodying a concept, page 12, lines 45-60; see also the first step in the flowchart illustrated in drawing Figure 6, page 28).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

24. Claims 16-40 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lazarus et al.** (U.S. Patent 6,134,532) in view of **Addison et al.** (European Patent Application EP 0,597,630) in view of **Eldering** (U.S. Patent 6,298,348).

25. Regarding claim 16, **Lazarus et al.** teaches a prior art method for displaying documents responsive to received search key words substantially as claimed, comprising:

a) identifying one or more documents related to the received search key words (see disclosure of prior art systems for displaying targeted advertisements to users that determine advertisements to be displayed by correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

b) transmitting for display the one or more documents (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a method for displaying documents wherein the documents are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a method for displaying documents responsive to a received concept comprising:

a) determining one or more concepts close in meaning to the received concept (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

b) identifying one or more documents related to the received concept or one or more concepts close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

c) transmitting for display the one or more documents based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final

display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display documents wherein the documents are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching documents (in this case, advertisements) on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and furthermore, because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a method wherein the documents are ordered corresponding to the relationship between monetary values determined for each of the identified documents.

Eldering, however, teaches a method wherein the documents are ordered corresponding to the relationship between monetary values determined for each of the identified documents (see disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved documents based upon the relationship between monetary values determined for each of the identified documents, since the value assigned to the documents [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a

relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

26. Regarding claim 23, **Lazarus et al.** teaches a prior art method for displaying advertisements related to received search key words substantially as claimed, comprising:

a) identifying one or more advertisements related to the received search key words (see disclosure of prior art systems for displaying targeted advertisements to users that determine advertisements to be displayed by correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

b) transmitting for display the one or more advertisements (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a method for displaying advertisements wherein the advertisements are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a method for displaying advertisements responsive to a received concept comprising:

a) determining one or more concepts close in meaning to the received concept (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

b) identifying one or more advertisements related to the received concept or one or more concepts close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

c) transmitting for display the one or more advertisements based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final

display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display advertisements wherein the advertisements are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching advertisements on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and furthermore, because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a method wherein the advertisements are ordered corresponding to the relationship between monetary values determined for each of the identified advertisements.

Eldering, however, teaches a method wherein the advertisements are ordered corresponding to the relationship between monetary values determined for each of the identified advertisements (see disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved advertisements based upon the relationship between monetary values determined for each of the identified advertisements, since the value assigned to the advertisements correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high

price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

27. Regarding claim 29, **Lazarus et al.** teaches a prior art method for generating a result relative to a search request substantially as claimed, comprising:

a) maintaining a target data set comprising a plurality of target data set elements associated with one or more search key words (see disclosure of an advertisement selection mechanism, wherein each advertisement therein has been manually associated with one or more search key words, col. 3, lines 29-48);

b) receiving at least one key word for a search request (see disclosure that a user submits one or more keywords, col. 3, lines 29-35);

c) identifying one or more target data elements related to the received search key words (see disclosure of prior art systems for displaying targeted advertisements to users that determine advertisements to be displayed by

correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

d) transmitting for display the one or more target data elements (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a method for displaying target data elements wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a method for displaying target data elements responsive to a received concept comprising:

a) identifying one or more target data elements close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

b) transmitting for display the one or more target data elements based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display documents wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching target data elements (in this case, advertisements) on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and furthermore, because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a method wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements.

Eldering, however, teaches a method wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements (see disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved target data elements based upon the relationship between monetary values determined for each of the identified target data elements, since the

value assigned to the target data elements [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

28. Regarding claim 35, **Lazarus et al.** teaches a prior art method for generating a result related to a search request substantially as claimed, comprising:

a) maintaining a target data set comprising a plurality of target data set elements associated with one or more search key words (see disclosure of an advertisement selection mechanism, wherein each advertisement therein has been manually associated with one or more search key words, col. 3, lines 29-48);

b) receiving at least one key word for a search request (see disclosure that a user submits one or more keywords, col. 3, lines 29-35);

c) identifying one or more target data elements related to the received search key words (see disclosure of prior art systems for displaying targeted advertisements to users that determine advertisements to be displayed by correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

d) transmitting for display the one or more target data elements (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a method for displaying target data elements wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a method for displaying target data elements responsive to a received concept comprising:

a) identifying one or more target data elements close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of

concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

b) transmitting for display the one or more target data elements based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display documents wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching target data elements (in this case, advertisements) on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and furthermore, because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a method wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements.

Eldering, however, teaches a method wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements (see disclosure that the price charged to access to consumers varies as a function of the applicability of the advertisement to the consumer, rendering inherent the assignment of a base monetary value to elements in the target data set, col. 5, lines 36-44; see also disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved target data elements based upon the relationship between monetary values determined for each of the identified target data elements, since the value assigned to the target data elements [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

29. Regarding claim 49, **Lazarus et al.** teaches a prior art system for displaying documents responsive to received search key words substantially as claimed, comprising:

a) identification means for identifying one or more documents related to the received search key words (see disclosure of prior art systems for displaying targeted advertisements to users that determine advertisements

to be displayed by correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

b) transmission means for transmitting for display the one or more documents (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a system for displaying documents wherein the documents are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a system for displaying documents responsive to a received concept comprising:

a) determination means for determining one or more concepts close in meaning to the received concept (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

b) identification means for identifying one or more documents related to the received concept or one or more concepts close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

c) transmission means for transmitting for display the one or more documents based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display documents wherein the documents are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching documents (in this case, advertisements) on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and

furthermore, because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a system wherein the documents are ordered corresponding to the relationship between monetary values determined for each of the identified documents.

Eldering, however, teaches a system wherein the documents are ordered corresponding to the relationship between monetary values determined for each of the identified documents (see disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved documents based upon the relationship between monetary values determined for each of the identified documents, since the value assigned to the documents [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

30. Regarding claim 50, **Lazarus et al.** teaches a prior art system for displaying advertisements related to received search key words substantially as claimed, comprising:

a) identification means for identifying one or more advertisements related to the received search key words (see disclosure of prior art systems for

displaying targeted advertisements to users that determine advertisements to be displayed by correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

b) transmission means for transmitting for display the one or more advertisements (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a system for displaying advertisements wherein the advertisements are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a system for displaying advertisements responsive to a received concept comprising:

a) determination means for determining one or more concepts close in meaning to the received concept (see disclosure that the user's query is 'exploded' into related concepts, page 12, lines 45-46; see also the disclosure of step 3 Look for Closely Associated Concepts, page 13, lines 29-39);

b) identification means for identifying one or more advertisements related to the received concept or one or more concepts close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

c) transmission means for transmitting for display the one or more advertisements based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display advertisements wherein the advertisements are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching advertisements on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and furthermore,

because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a system wherein the advertisements are ordered corresponding to the relationship between monetary values determined for each of the identified advertisements.

Eldering, however, teaches a system wherein the advertisements are ordered corresponding to the relationship between monetary values determined for each of the identified advertisements (see disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved advertisements based upon the relationship between monetary values determined for each of the identified advertisements, since the value assigned to the advertisements correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

31. Regarding claim 51, **Lazarus et al.** teaches a prior art system for generating a result relative to a search request substantially as claimed, comprising:

a) storage means for maintaining a target data set comprising a plurality of target data set elements associated with one or more search key words (see disclosure of an advertisement selection mechanism, wherein each

advertisement therein has been manually associated with one or more search key words, col. 3, lines 29-48);

b) receiving means for receiving at least one key word for a search request (see disclosure that a user submits one or more keywords, col. 3, lines 29-35);

c) identification means for identifying one or more target data elements related to the received search key words (see disclosure of prior art systems for displaying targeted advertisements to users that determine advertisements to be displayed by correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

d) transmission means for transmitting for display the one or more target data elements (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a system for displaying target data elements wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a system for displaying target data elements responsive to a received concept comprising:

a) identification means for identifying one or more target data elements close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

b) transmission means for transmitting for display the one or more target data elements based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display documents wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching target data elements (in this case,

advertisements) on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and furthermore, because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a system wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements.

Eldering, however, teaches a system wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements (see disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it

is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved target data elements based upon the relationship between monetary values determined for each of the identified target data elements, since the value assigned to the target data elements [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

32. Regarding claim 52, **Lazarus et al.** teaches a prior art system for generating a result related to a search request substantially as claimed, comprising:

a) storage means for maintaining a target data set comprising a plurality of target data set elements associated with one or more search key words (see disclosure of an advertisement selection mechanism, wherein each advertisement therein has been manually associated with one or more search key words, col. 3, lines 29-48);

b) receiving means for receiving at least one key word for a search request (see disclosure that a user submits one or more keywords, col. 3, lines 29-35);

c) identification means for identifying one or more target data elements related to the received search key words (see disclosure of prior art systems for displaying targeted advertisements to users that determine advertisements to be displayed by correlating the advertisement with search key words entered by the user, col. 1, lines 44-58; see also col. 2, lines 39-41; see also col. 3, lines 29-47); and

d) transmission means for transmitting for display the one or more target data elements (see disclosure that when an observed user behavior, such as a user-issued query contains a known keyword, one of the ads associated with the keyword is selected for display, col. 3, lines 32-35).

Lazarus et al. does not explicitly teach a system for displaying target data elements wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords).

Addison et al., however, teaches a system for displaying target data elements responsive to a received concept comprising:

a) identification means for identifying one or more target data elements close in meaning to the received concept (see disclosure that the word senses in the user's request, along with closely associated concepts, are used as keys into the database of concepts to find concept references which point to particular documents, step 5 Index into the Concept Indexes, page 13, lines 51-57); and

b) transmission means for transmitting for display the one or more target data elements based on an order (see disclosure that the results of the text searching are retrieved and displayed in ranked order, page 5, lines 50-52; see also disclosure that the final display containing the matched documents is prepared and transmitted to the display, page 16, lines 26-29; see also disclosure of ranking of results, page 15, beginning on line 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to display documents wherein the target data elements are selected on the basis of matching concepts (as opposed to matching keywords), since **Lazarus et al.** explicitly teaches that a shortcoming of matching target data elements (in this case, advertisements) on the basis of matching search key words is that advertisements that are conceptually close but do not contain the specified key words would be missed (col. 2, lines 39-40), and furthermore, because searching for "concepts" has been found to be more accurate that Boolean, keyword or statistical searching as practiced in the prior art (see **Addison et al.**, page 2, lines 6-8).

Neither **Lazarus et al.** nor **Addison et al.** explicitly teaches a system wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements.

Eldering, however, teaches a system wherein the target data elements are ordered corresponding to the relationship between monetary values determined for each of the identified target data elements (see disclosure that the price charged to access to consumers varies as a function of the applicability of the advertisement to the consumer, rendering inherent the assignment of a base monetary value to elements in

the target data set, col. 5, lines 36-44; see also disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved target data elements based upon the relationship between monetary values determined for each of the identified target data elements, since the value assigned to the target data elements [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it

is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

33. Regarding claims 17, 18, 20-22, 24, 25, 27, 28, 30, 31, 33, 34, 36, 37, 39 and 40, **Eldering** additionally teaches a method wherein the order is based on descending predicted relevance/semantic distance/degree of closeness in meaning/context of the document to the received concept (see disclosure that that the price charged to access to consumers varies as a function of the applicability of the advertisement to the consumer, col. 5, lines 36-44).

34. Regarding claims 19, 32 and 38, **Eldering** teaches a method wherein the monetary values are prices associated with viewings of the one or more documents (see col. 3, lines 46-56).

35. Regarding claim 26, **Eldering** additionally teaches a method wherein the elements in the target data set are assigned a monetary value based upon how closely the element matched the requested search (see col. 1, lines 18-36; see also col. 3, lines 46-56; see also col. 5, lines 36-45).

36. Claims 42, 44, 46, 48 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Addison et al.** (European Patent Application EP 0,597,630) as applied to claims 41, 43, 45, 47 and 53-55 above, and further in view of **Eldering** (U.S. Patent 6,298,348).

37. Regarding claims 42 and 46, **Addison et al.** teaches a method of generating a search result substantially as claimed.

Addison et al. does not explicitly teach a method wherein the documents are advertisements.

Eldering, however, explicitly teaches a method wherein the documents are advertisements (see col. 7, lines 20-32 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to return information about an advertisement or a product or service, since

this would allow advertisements to be targeted toward consumers that are likely to have an interest in the advertisement, based upon the assumption that they are interested in the concepts reflected in the search query input by the user.

38. Regarding claims 44 and 48, **Addison et al.** teaches a method of generating a search result substantially as claimed.

Addison et al. does not explicitly teach a method wherein the association of documents with concepts is based in part on a monetary value.

Eldering teaches a method wherein the association of documents with concepts is based in part on a monetary value (see disclosure that that the price charged to access to consumers varies as a function of the applicability of the advertisement to the consumer, rendering inherent the assignment of a monetary value to elements in the target data set, col. 5, lines 36-44; see also disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for

which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved target data elements based upon the relationship between monetary values determined for each of the identified target data elements, since the value assigned to the target data elements [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

39. Regarding claim 56, **Addison et al.** teaches a method of generating a search result in response to a search request substantially as claimed.

Addison et al. does not explicitly teach a method wherein the target data elements are ordered in accordance with the closeness in meaning between the search request and the larger set of search terms, wherein the monetary values are based on the closeness in meaning.

Eldering, however, teaches a method wherein the target data elements are ordered in accordance with the closeness in meaning between the search request and the larger set of search terms, wherein the monetary values are based on the closeness in meaning (see disclosure that the price charged to access to consumers varies as a function of the applicability of the advertisement to the consumer, rendering inherent the assignment of a monetary value to elements in the target data set, col. 5, lines 36-44; see also disclosure that advertisements can be assigned a value commensurate with their perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [which, in this case, would be determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged

for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser, see col. 3, lines 46-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to order retrieved target data elements based upon the relationship between monetary values determined for each of the identified target data elements, since the value assigned to the target data elements [in this case, advertisements] correspond to the perceived value to the advertiser, such that if an advertisement is found to be very highly correlated with a consumer's product preferences [as determined by matching the concept for which the consumer is searching with the concept associated with a given advertisement], a relatively high price can be charged for transmitting the advertisement to the consumer, since it can be assumed that if said correlation is high, it is likely that the advertisement will be of interest to the consumer, and therefore more likely to result in a sale for the advertiser (see col. 3, lines 46-56).

Response to Arguments

40. Applicant's arguments filed 27 April 2007 have been fully considered but they are not persuasive.

41. Regarding the Applicants' argument that the limitation of 'receiving a search request' as recited in claim 55 constitutes a tangible result, the examiner respectfully disagrees.

Not only does the recited 'receiving' step not constitute a tangible result, it does not constitute a result at all. The final step of the claim is a search. Nowhere does the claim cite the retrieval of any matching documents, which might constitute at least a result, let alone something tangible being done with said matching documents.

The rejections of claims 55 and 56 under 35 U.S.C. § 101 is maintained.

42. Regarding the Applicants' argument regarding the use of the **Caid et al.** reference in the rejections of record, the examiner finds these arguments persuasive, and has presented new grounds of rejection in the instant Office action.

Conclusion

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ausborn (U.S. Patent 5,056,021) teaches a method for abstracting meanings from natural language words.

Turtle (U.S. Patent 5,418,948) teaches a system for concept matching of natural language queries with a database of document concepts.

Turtle et al. (U.S. Patent 5,488,725) teaches a system for document retrieval by successive iterated probability sampling.

Dahlgren et al. (U.S. Patent 5,794,050) teaches a system for interpreting natural language input using modules for parsing, disambiguation, formal semantics, anaphora resolution, coherence and naïve semantic lexicon.

Sotomayor (U.S. Patent 5,842,206) teaches a method for searching one or more electronically stored documents.

Wical (U.S. Patent 5,940,821) teaches a knowledge base search and retrieval system including factual knowledge base queries and concept knowledge base queries.

Chess (U.S. Patent 6,026,374) teaches a system for locating desired products by estimating the semantic distance between each information product and the buyer's keywords.

Wical (U.S. Patent 6,038,560) teaches a concept knowledge base search and retrieval system.

Wical (U.S. Patent 6,460,034) teaches a document knowledge base research and retrieval system.

Lin et al. (U.S. Patent 6,675,159) teaches a concept-based search and retrieval system.

McElfresh et al. (U.S. Patent 6,907,566) teaches a method for optimum placement of advertisements on a web page.

Graham et al. (U.S. Patent Application Publication 2006/0122884) teaches a system for content-based web advertising.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke S. Wassum whose telephone number is 571-272-4119. The examiner can normally be reached on Monday-Friday 8:30-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

In addition, INFORMAL or DRAFT communications may be faxed directly to the examiner at 571-273-4119. Such communications must be clearly marked as INFORMAL, DRAFT or UNOFFICIAL.

Customer Service for Tech Center 2100 can be reached during regular business hours at (571) 272-2100, or fax (571) 273-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 2167

lsw
23 July 2007